paleoseti

The magazine for Ancient Astronaut & Lost Civilizations research
ANCIENT TECHNOLOGIES, CULTURES AND ADVENTURE

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Letter from the Editor

Dear readers,

Welcome to Issue 11 of PaleoSeti Magazine!

After 10 free issues of PaleoSeti Magazine, we had to make a difficult decision. We came to the conclusion that the time commitment to produce the magazine is too great in order to continue it free of charge.

So we had to change it for a pay-per-issue model of US$1.50 per issue. We think this is a fair price for the unique content in PaleoSeti Magazine. We hope you agree and will stay with us in the future.

In this issue, we will have a closer look at the "Stone of Kings" as Jade is sometimes called. Why has Jade been chosen by so many ancient cultures as a "sacred" stone, and why was it always associated with Royalty? Are there any special secrets surrounding Jade? In the second article we will look at the famous Antikythera Mechanism, this ancient Greek mechanical puzzle which was rescued from the bottom of the Mediterranean Sea almost a century ago.

In the future, we will have new and exciting surprises for you in store. Many more ancient mysteries are waiting to be discovered. Let us take you there and stimulate the mind. In a world with so many negatives, the search for the truth of what really happened in our ancient past can be an "island of calm". We have to make the world a better place, let's start by uncovering mysteries together.

For now I hope you will enjoy this issue of PaleSeti Magazine.

Sincerely Yours,

Herbert Eisengruber
Editor-in-Chief, paleoseti magazine

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The ancient ruins of Mesa Verde in the USA. The native people in the region had a strong connection to the stars. Many buildings had a strong astronomical connection.

JADE! The Stone Of Kings

THE SADDEST ASPECT OF LIFE RIGHT NOW IS THAT SCIENCE GATHERS KNOWLEDGE FASTER THAN SOCIETY GATHERS WISDOM.

ISSAC ASIMOV.

Article by Herbert Eisengruber

Since the dawn of time, stones, rocks and minerals have captivated human kind's imagination. Gem stones always had special meaning in different cultures all over the world; they defined social status, wealth and were – and still are - important for the definition of beauty. Diamonds are a girl's best friend after all.

But sometimes gem stones and minerals also served an important role in tool making and other "practical" applications. Obsidian is such an example. Ever since humans started to use tools, obsidian -with its special properties- was utilized for cutting instruments, spear- and arrowheads. Larger Obsidian deposits helped develop the first settlements humanity ever established. Precious and semi-precious stones were, therefore, a key to human development worldwide. As time went on early humans and cultures learned how to work with the stones and developed skills which led to incredible art. But are there stones that are "special" among those special stones?

In Issue 6 of PaleoSeti Magazine I wrote about quartz, one of the hardest stones known to man, which the ancient cultures seemed to have no problem working with, despite not having the right tools to do so.

Yet there is another stone which had the special attention of the ancient people in many cultures all over the world. This stone is commonly known as Jade.

To start out, let's have a look at what Jade is. As always, Wikipedia knows more:

"Jade is an ornamental green rock. The term jade is applied to two different metamorphic rocks that are composed of different silicate minerals:
Nephrite consists of a microcrystalline interlocking fi-

brous matrix of the calcium, magnesium-iron rich amphibole mineral series tremolite (calcium-magnesium)-ferroactinolite(calcium-magnesium-iron). The middle member of this series with an intermediate composition is called actinolite (the silky fibrous mineral form is one form of asbestos).The higher the iron content, the greener the color.

Jadeite is a sodium- and aluminium-rich pyroxene. The precious form of jadeite jade is a microcrystalline interlocking growth of jadeite crystals." [1]

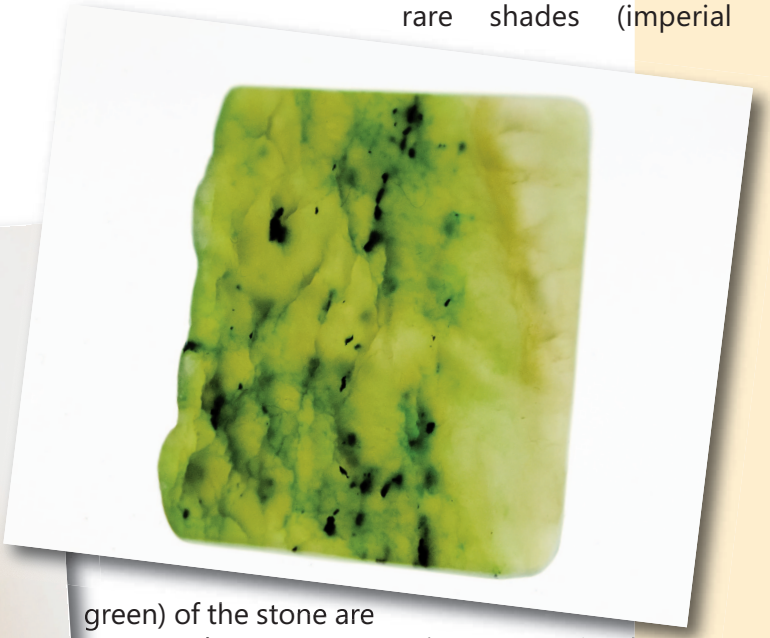
The above definition is not as boring as it might seem. We will come back to it. Jade is a stone which naturally appears in quite a few places all over the world. Today the main mining spots are Guatemala, China, India, Canada, Russia and many other countries. The demand for Jade is unusually high, especially since it has no real "practical" applications like diamonds. Jade is simply in high demand in many cultures for historical reasons.

First and foremost, it's a coveted stone to be used in jewelry. Especially in the Asian markets, Jade in certain colors can fetch nice prices. But also in the Latin American market, Jade is a prized possession. During a trip to Guatemala, we visited a Jade factory in which one can see the demand and the high prices this stone can fetch.

Jade from different countries. Canadian Jade on the bottom, Russian Jade on the right.

It is a common misconception that Jade is always green.

It comes in different shades varying from green, lavender, red, yellow, white and black, but by far the most common color is green. Some rare shades (imperial green) of the stone are among the most expensive stones in the world. But the reason Jade is highly sought after today, has historic reasons.



In the ancient world, Jade seemed to have been something very special. The amazing thing: This phenomenon can be found in ancient cultures all over the world. The ancient Mesoamerican people (Maya, Atzecs etc.) regarded Jade as the "Stone of Kings". An-

Jade Facts

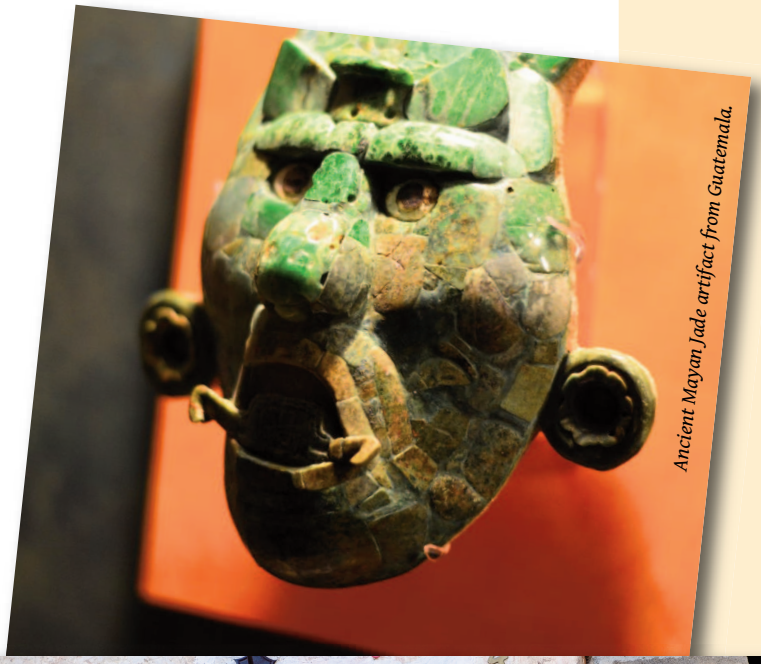
Mohs Hardness of 7 with amonoclinic crystal structure – Jadeite
Mohs Hardness of 6.5 with a monoclinic crystal structure – Nephrite

For centuries it was believed that Jade was but one gem stone. In 1863 that changed. Two types of Jade were recognized, Jadeite and Nephrite.

Jadeite is found in rocks, as pebbles and as boulders; some boulders actually developed a skin of sorts around the Jadeite which is often incorporated into carvings. Both Myanmar and Guatemala have been found rich with Jadeite, but it is also found in Japan and the western part of the US.

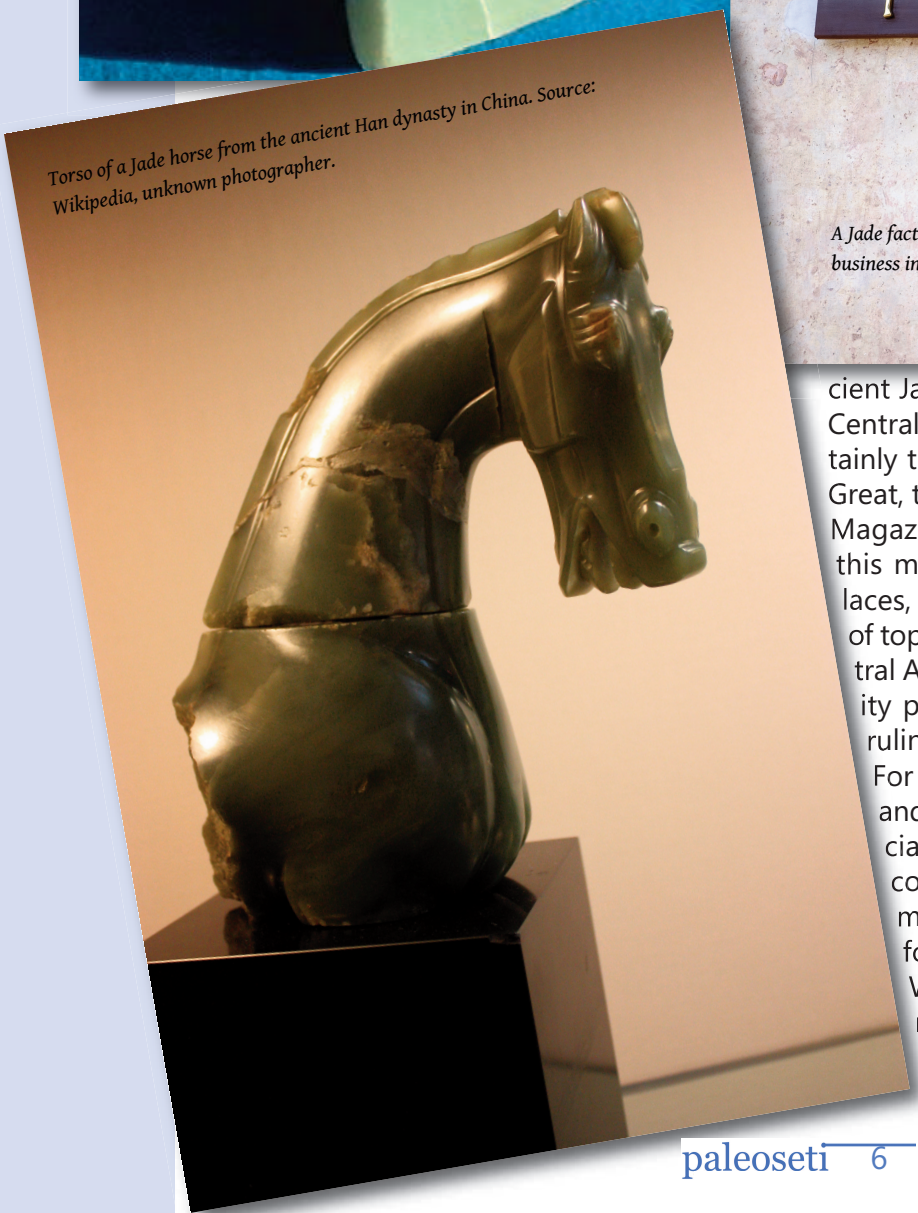
Nephrite's greatest deposits have been found in many forms in China, Central Asia, and later in Myanmar; later to be discovered in Russia, Siberia, New Zealand, Canada, Mexico, and the USA, among others.

Raw Jade. Source: Wikipedia commons.



Ancient Mayan Jade artifact from Guatemala.

A Jade factory in Guatemala. To this day, Jade is big business in this Central American country.



Torso of a Jade horse from the ancient Han dynasty in China. Source: Wikipedia, unknown photographer.

cient Jade artifacts can be found in museums all over Central and South America and the culmination is certainly the absolutely stunning Jade mask of Pakal the Great, the mysterious ruler of Palenque (see: PaleoSeti Magazine Issue 3). The ancient Maya artists created this magnificent piece along with the Ruler's necklaces, earrings and bracelets of many different pieces of top quality Jade. Browsing through any of the Central American museums will reveal that the top quality pieces were only designed for royalty and the ruling class by the top artisans of the time.

For the ancient cultures of Asia - India, Japan, Korea and especially China – Jade was, and is, a very special - for some, the most special - stone always connected to the gods, royalty and wealth. In a more esoteric context, Jade is said to bring good fortune and luck.

What is so special about Jade? Why Jade and not any other stone? There are stones which are rarer (scarcity always increases value, today and in the past), look just as nice and are easier to

work with. Soapstone is such an example; it is very similar to Jade in appearance. And indeed, soapstone (Speckstein for my audience in the German speaking realm) was widely used in Asia as some form of "Jade for the poor".

It cannot be stressed enough how sought after Jade was in ancient Asia and especially China. So much so, that many bright minds were hired by kings and emperors to create it artificially. Those were the counterparts of the alchemists in Europe, who desperately wanted to create gold. Regular readers of PaleoSeti Magazine will remember the article "The Colors of the Ancients" in Issue 6. [2] The quest for artificial Jade in ancient times led to the discovery of a mysterious paint applied to the terra-cotta warrior army of the first Chinese emperor. [2]

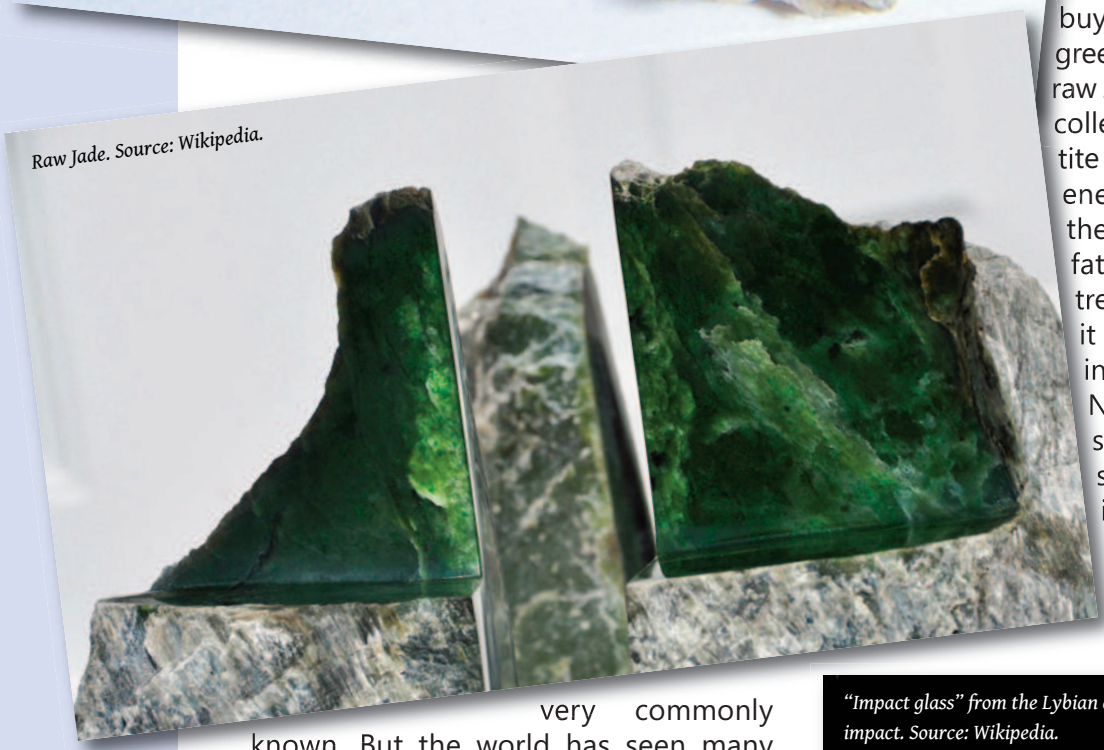
Does Jade have any other special properties? Something that connects it to the 'gods', the ones that ancient kings and emperors associated themselves with all over the world in times long past? The answer to this question is complex as the research into this is still in its early stages. Follow me as I attempt to "think out loud" and get an explanation for the ancients' obsession with Jade which continues to this day. To do this, we will have to make a cut:

In July 1945, a big part of the world laid in ruins. In Europe, Germany just capitulated a month before, millions upon millions of people lost their lives. Unlike in Europe, the Japanese forces in Asia were far from capitulating. The world and the Allies have grown tired of war and everybody wanted it to end as swiftly as possible. The constant pressure of having the best weapons and technology available to win battles led to great advances in technology on both sides during the war years. Radar, sonar, rockets and jet-engines are just a few examples of technology developed for and during the war. But the biggest bang – in the true sense of the word – was developed by the Americans with the help of some of the smartest physicists at the time in New Mexico, USA, during a top secret project called the "Manhattan Project". We know it now as the nuclear bomb. The bomb was ultimately used on the Japanese cities of Hiroshima and Nagasaki, killing an estimated number of 200,000 human beings. The bomb helped to bring World War II to an earlier end, but caused indescribable pain and suffering. To this day, the two bombs dropped on Japan are the only times such weapons were used during battle. Let's hope it will stay that way. This is

The only known properly exposed color still shot from the Trinity explosion, the first nuclear explosion (at least in modern times). Source: Wikipedia; Photo: Jack W. Aeby

"Trinitite" is a glass like substance left behind by massive explosions. Source: Wikipedia.

Different examples of "Trinitite". Once polished it resembles Jade remarkably well. Source: Wikipedia.

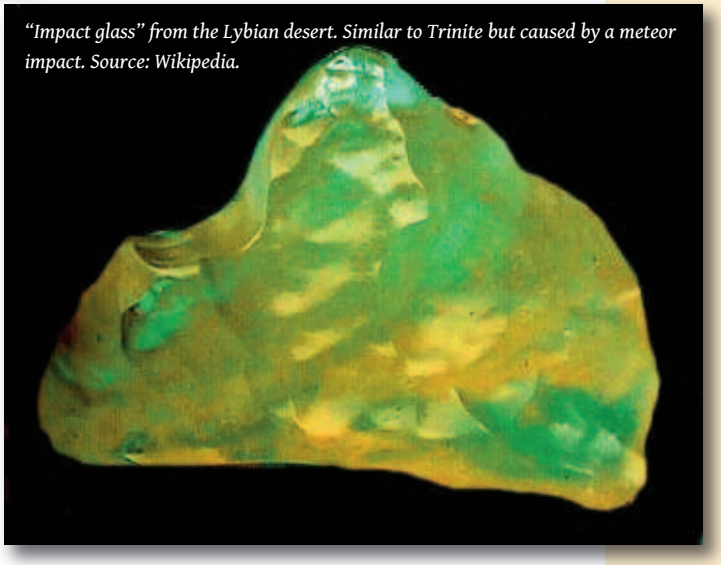


Raw Jade. Source: Wikipedia.

sandwiches and snacks, but also rocks and fossils from the area and the rest of the country. I stopped at some for some refreshments when a box of green rocks caught my eye. It was marked with "Local Trinitite – buy a piece of history". The small, greenish rocks reminded me of some raw Jade my father had in his mineral collection. But I never heard of Trinitite before. The sales person enlightened me: The nuclear explosion of the bomb activated here on this fateful day in 1945, created such tremendous heat and pressure that it melted the local sand and rocks into a greenish, glassy substance. Named "Trinitite" after the Trinity site, it has always been a popular souvenir for many tourists coming to the area. In the late 1940s, Trinitite was also used in commercial jewelry advertised as "Bomb-site Jewelry". Although very commonly known. But the world has seen many more nuclear explosions as is known to many. Between 1945 and 2016 more than two thousand nuclear weapons have been detonated by several nations.

During a 3 month tour of the United States in 2003, I drove through New Mexico in search of Ancient Rock carvings when I came across signs of the "Trinity National Historic Site". Merely by coincidence, I drove Highway 380, and I stood about 3km away from the site that the world's first nuclear explosion took place on July 16th, 1945. It is a chilling site, one that changed the world forever.

Driving further on Highway 380 one comes across many small roadside businesses, selling cold drinks,



"Impact glass" from the Lybian desert. Similar to Trinite but caused by a meteor impact. Source: Wikipedia.

being a sucker for little souvenirs and memorabilia from my trips, the fact that Trinitite is quite radioactive prevented me from bringing one home. It might also be that Trinitite jewelry is not the healthiest option for a loved one and that's why it hasn't become the most popular seller in a jeweler's arsenal. Like I said, "Diamonds are a girl's best friend."

You may ask what does all of that have to do with Jade? Patience, we will get to it.

In many ancient scripts and holy books from all over the world, the interested reader can find stories of destruction and war among the 'gods'. Probably the most well-known battles can be found in the ancient Hindu texts of the Mahabarata and the Ramayana. These texts contain incredible detail about the technology the "gods" used in ancient times. Among this technology – which will interest us in future issues of PaleoSeti Magazine – the texts describe weapons which the "gods" fought their wars with.

One of those weapons was the Brahmastra:

"*Embedded with the mystical force of Brahma, this weapon releases millions of missiles, great fires and a destructive potential capable of extinguishing all creation, if not used by and aimed only at a celestial fighter. Modern speculation has equated its destructive nature to be similar to that of a nuclear weapon, [highlighting by the author] it has been used multiple times in Ramayana, Indrajit used it against hanuman,Lakshmana asked permission to use it against Indrajit, which lord Rama declined, Lakshmana used it to kill Atikaya, lord Rama used it as final arrow to kill Ravana. In the epic Mahabharata, it is said that the weapon manifest with the single head of Lord Brahma as its tip. In Mahabharata era Parasurama, Bhishma, Drona, Karna, Kripa, Ashwatthama,Arjuna,Yudhishtir and several Maharathi's possessed the knowledge to invoke this weapon.*" [3]

Battle scene from the ancient Indian vedes. The vedes tell us about epic wars with incredibly powerful weapons. Source: Wikipedia.

Ancient Indian depiction of the God Shiva. Note the statue surrounded by an oval shape with stylized flames. Memories of an ancient nuclear explotion"mushroom" . Source: Wikipedia.

And then there is the Brahmashirsha astra "*A weapon capable of greater destruction than the Brahmastra. It can burn all creation to ashes once discharged, Arjuna and ashwatthama both used it against each other after the Mahabharata war. Capable of killing even heavens. Was used by Ashwatthama on Parikshit. It is thought that the Brahmashirsha is the evolution of the Brahmastra, 4 times stronger than Brahmastra. It's similar to modern day hydrogen bomb or thermonuclear (fusion) bomb. In the epic Mahabharata, it is said that the weapon manifest with the four heads of Lord Brahma as its tip. In Mahabharata era Parasurama,Bhishma, Drona,Karna, Ashwatthama, Arjuna possessed the knowledge to invoke this weapon.*" [3]

I could go on and on about weaponry and technology in the ancient Indian texts. For the interested reader, I suggest the study of the works of Dr. Dileep Kumar Kanjilal, a retired professor of the Calcutta Sanskrit Col-

lege and a leading scholar in Sanskrit. He is famous for his Book "*Vimana in Ancient India*". [5]
The ancient Indian site of Paraspur contains ruins that shows violent destruction, consistent with the force of a nuclear blast. Not only are the destruction of the buildings interesting, but also the fact that the stones show the presence of a glass like layer. In other parts of the site, rocks very similar to Trinitite have been found. In PaleoSeti Magazine Issue 1 [4], I talked about the site Saqusayhuaman above the city of Cusco in Peru, where the same signs of destruction along with very similar stones covered with the glass-like substance have been found.

Artist's depiction of the destruction of Sodom and Gomorrah in the Bible. Did a nuclear explosion happen here in ancient times? Source: Wikipedia.

"" Steven Collins, Dean of the College of Archaeology and Biblical History at Albuquerque's Trinity Southwest University, and his group spent several weeks last winter excavating Tall el-Hammam, a site in Jordan he believes fits the profile of Sodom. He has committed to working there for seven seasons."...
"Collins visited sites and used potsherds to date them. Five ruins on the plain's east side match the locations, artifacts and time of occupation for Sodom and towns the Bible mentions in relation to it.
"It is so good archaeologically and geographically, it's almost unbelievable," he said of the match.
He said a flash event heated the pottery so much, so fast after it broke that the surface turned to glass and began flowing over the edge of the break.
Prolonged exposure to such heat causes the whole clay piece to lose its shape, but only the surface of this potsherd changed. Collins believes this indicates a flash event.
He is having a number of people, including New Mexico Tech scientists, examine the potsherd to determine what the glaze is. Material engineers at the site said it looks like Trinitite, the substance materials, such as sand, turn into when subjected to a nuclear blast." [7]

Trinitite-like substances and glasses are also found in the ancient town of Mohenjo-Daro in Pakistan, ancient sites in the Gobi desert that covers China and Mongolia as well as in places in Libya.
Of course, Trinitite-like substances can be created by other intense blasts not only nuclear explosions. They have been found near meteor impact craters for example. But such an impact crater is – by definition – pretty visible. The strange thing is that - in most cases of Trinitite and glass-like residue among ancient sites and settlements – these craters are absent.
Still, what does all of this have to do with Jade? So let's do a little thought experiment:
Imagine people without any technical knowledge witnessing an explosion of the scale of a nuclear blast. Maybe even witnessing the destruction of a settlement. After a while, those people would return to the site of the blast. What a traumatic experience that must have been. The god(s) must be all powerful. What's more, they now find green stones that weren't there before. Naturally, everybody wants one. The stones are highly coveted "relics" as they must be connected to the god(s). Word gets out and spreads like wildfire. Over the decades, centuries and even millennia, the blast event becomes a mythological event. One which gets told and re-told over many generations. Details will be added or forgotten, but the core will be the same. What stays is the longing for the "artifacts", those mysterious green stones, the stone of the all-

powerful god(s), the stone of kings. What is closest in appearance to this "Stone of the Gods"? Jade fits the bill. On top of everything, it turns out that Jade is extremely durable while still workable with relatively unsophisticated tools.

Is it a coincidence that to this day Jade which displays the closest appearance to pure Trinitite is the most valuable?

Keep in mind the above is just a thought experiment. I'm thinking out loud, think "outside the box."

Or could it be that Jade is much more than we previously thought. Much more than just a pretty stone – an ornamental rock - we can make jewelry out of?

Remember the Jade definition at the beginning of this article, and I said we will come back to it?

Let's have a look at it again:

"*... Nephrite consists of a microcrystalline interlocking fibrous matrix of the calcium, magnesium-iron rich amphibole mineral series tremolite (calcium-magnesium)-ferroactinolite(calcium-magnesium-iron). The middle member of this series with an intermediate composition is called actinolite (the silky fibrous mineral form is one form of asbestos).The higher the iron content, the greener the color.*" [1]

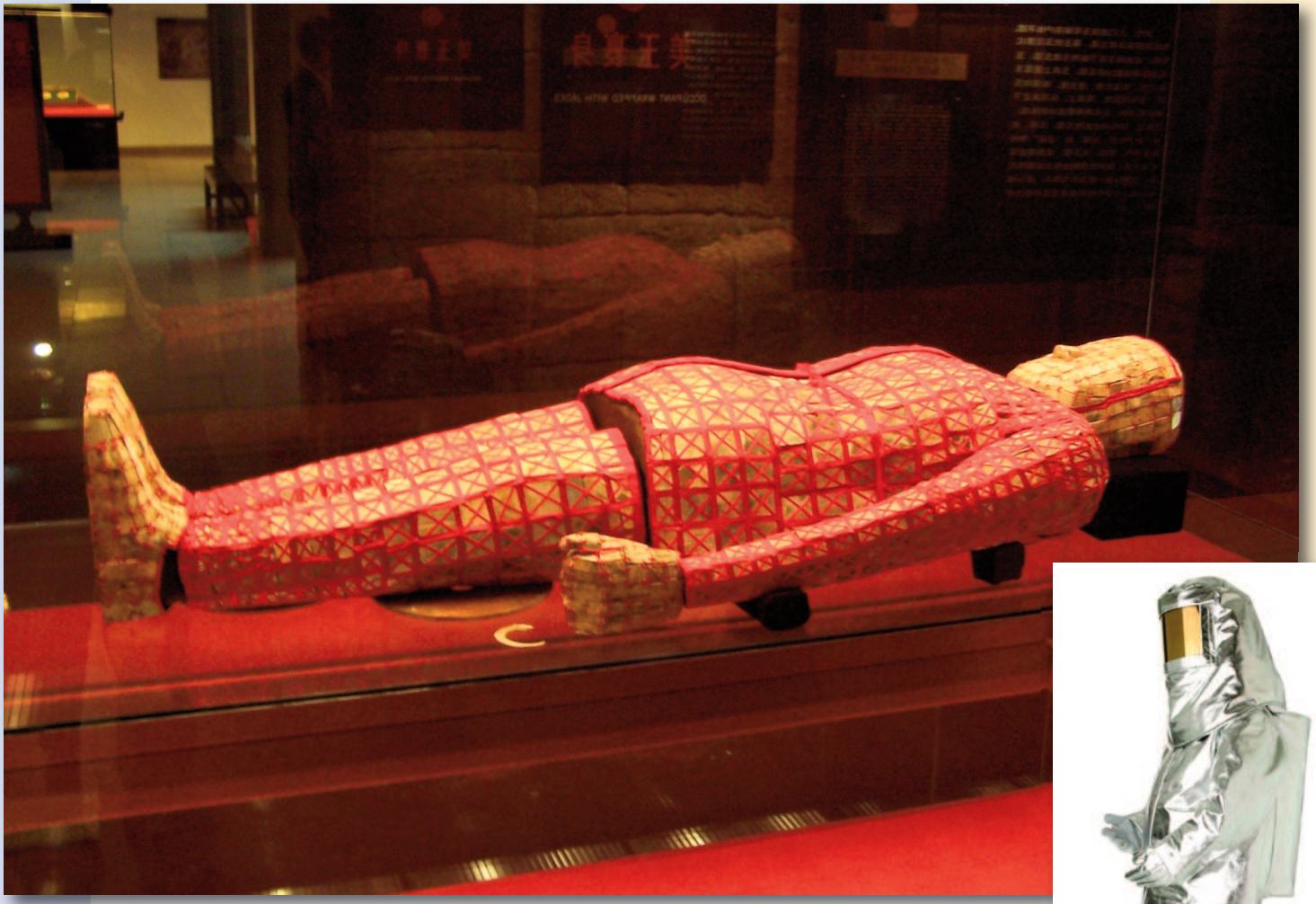
Wow! Jade contains a form of asbestos! Asbestos is certainly something even people without any science background have heard of before as it is infamous for its carcinogenic properties. Asbestos is a natural flame and heat inhibitor. When industrialization began in the late 1800s, it rapidly became the go-to substance for anything that needed to be heat resistant. By the 1970s, Asbestos was everywhere. From drywall to ceiling tiles, car brakes to protective clothing for firefighters. If you live or work in a house which was built in the 1950s to the 1970s, chances are that asbestos was used in its construction in some form or another. The unfortunate part is – as most people know by now – that Asbestos is highly carcinogenic. It is estimated that asbestos still kills approximately 12000-15000 people per year in the US alone.

Is it possible, that Jade was used in ancient times for something other than purely decorative purposes? As I mentioned previously Jade is considered highly durable.

In 1968, a discovery made in China which confirmed what many archaeologists at the time believed was merely a fairy-tale and a myth. The ancient scripture of China told stories about suits or clothing completely made from Jade.

A Han Dynasty jade burial suit at the National Museum of China, Beijing. Source: Wikipedia.

Then, from 1968 to 1983, several spectacular finds of complete body suits made from Jade have been found in Graves from several ancient Chinese dynasties. The suits are stunning in their workmanship and cover the whole body from head to toe. Some details of the suits, like the hands look extremely modern, like gloves with silk linings. The suits are made with hundreds of pieces of jade that are tightly woven together with durable silk thread. Although thousands of years old, the suits look like they came out of a factory yesterday. All the suits are generally considered burial suits by archaeologists as they were used to bury the bodies of the Chinese Emperors in. But does that necessarily mean that this was their main or only purpose? History teaches us that people have always been buried with or in things which were important to that society or in the individual. We know that from Egyptian pharaohs who



Top: Several complete Jade burial suits have been found in China. Each exquisitely made. Note the full body suit includes the face, just like a modern flame retardant suit today (right).
Below: Very modern looking detail of a glove of the Jade burial suit. Source: Wikipedia.

Detail of a Chinese Jade burial suit. Source: Wikipedia.

have been buried with all kinds of household items, weapons or even animals. Ever since human beings buried their dead, they did so with important items. The better social rank the dead person had, the more precious the items buried with him or her.
Could it be that the Jade "burial" suit had a completely different purpose all together? Was it even a burial suit?
Were the Jade suits found in the graves protective suits? The incredible durability of Jade along with its ability to provide protection from heat and flames (Asbestos group) would make the Jade suits amazing candidates for high heat resistant, flame retardent gear as we know today for firefighters or any other profession that requires to work with high temperatures.

Not only the ancient Chinese made "body protection" out of Jade. In Issue 3 of PaleoSeti Magazine [8], I wrote about the Jade mask of "Pakal the Great", the ancient ruler of Palenque. This Pakal is also depicted on the famous sarcophagus lid of Palenque on which one can clearly see flames shooting out of the back of the "craft" Pakal is sitting in. Was the Jade mask more than just decoration and a burial mask after all? Did it serve a purpose during the life of its owner? Did it provide protection for high heat and other undesirable side effects of a technical nature?

All these are questions I dare to ask. Questions which need much more research to be answered. Let's get on it.

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[1] https://en.wikipedia.org/wiki/Jade
[2] Eisengruber, Herbert "The Colors of the Ancients"; PaleoSeti Magazine Issue 6
[3] https://en.wikipedia.org/wiki/Hindu_mythological_wars
[4] Eisengruber, Herbert "Cusco, Peru – Playground of the Titans"; PaleoSeti Magazine Issue 1
[5] Daniken, Erich von, Kanjilal, Dileep Kumar; "Habe ich mich geirrt? – Pages 225-236"
[6] Bible, Book of Genesis 19
[7] http://www.s8int.com/sodom-gomorrah2.html
[8] Eisengruber, Herbert "Old mystery Palenque – New Discoveries"; PaleoSeti Magazine Issue

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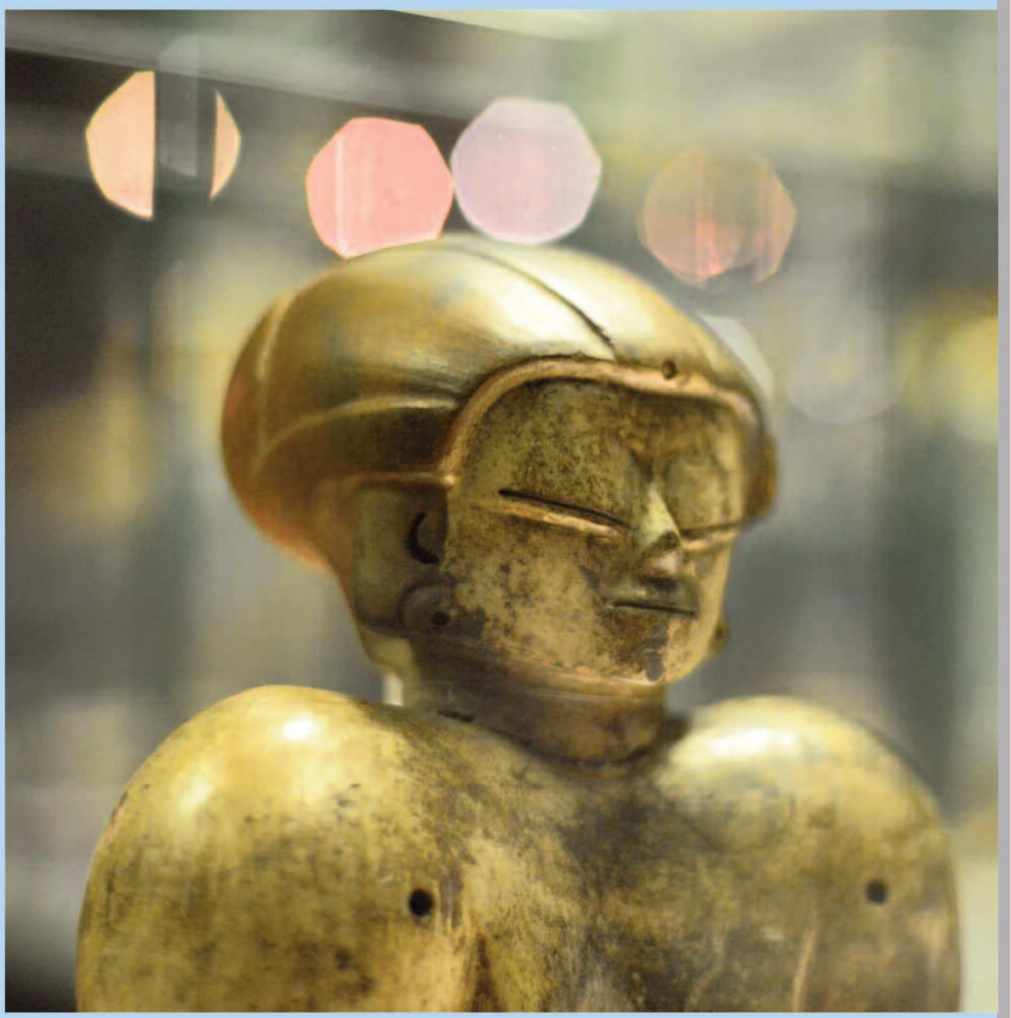
DelMundo Images

Travel & Archaeological Photography

Herbert & Beth Eisengruber

Do you like the photography featured in many of the articles in PaleoSeti Magazine? If so, let me introduce you to **DelMundo Images**, the stock photography site from *Eisengruber Publishing*. Over the next little while, **DelMundo Images** will steadily grow into a vast database of archaeological and travel photography. If you are looking for images of rare archaeological items and site your research, a great gift idea, a poster size image to hang on your wall, or your webpage and catalog project, **DelMundo Images** is a great source.



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www.DelMundoImages.com

The Antikythera Mechanism

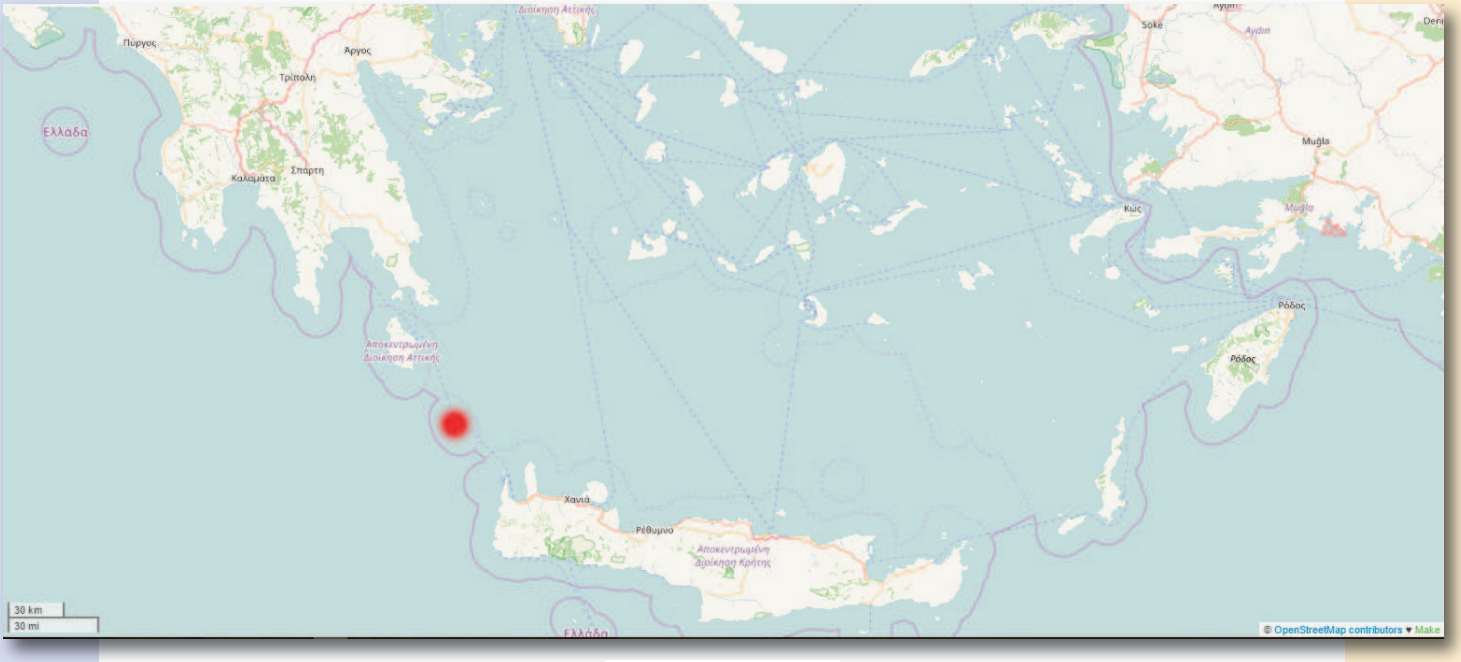
out place, out of time

Article by Herbert Eisengruber

The first years of the past century were exciting for the progress of science. Albert Einstein wrote his major works in Switzerland and the whole world stepped into a new industrial revolution with seemingly endless possibilities.
In Archaeology Egypt with its Valley of the Kings, it started to receive major attention from archaeologists and wealthy investors. Science and Archaeology were "in" and were discussed in fine clubs, during cricket and polo games over good brandy.
Little did they know that one of the most stunning and puzzling discoveries the world has ever seen was made off a tiny island in Greece by very unlikely explorers.

The Discovery

The year is 1900, shortly before the Christian world celebrates Easter. A party of six sponge fishermen from the Greek Island of Rhodes leave their harbor and sail towards their normal fishing grounds near the North African coast. After the work is done, they sail towards their home again when an upcoming storm forces them to stop and anchor at – during this time- the almost uninhabited Island of Antikythera. They rest for the night in a small, rocky bay to wait out the storm. The small Island of Antikythera lies on an ancient trade route; for thousands of years, ships sailed through here and the large Island of Crete to the Southeast. The Islands here are also known for their many shipwrecks, ancient and modern. The next morning, the sun is up again and the storm has moved on. Since they are already here, the fisher-



A modern reconstruction of the Antikythera Mechanism. Around the world, only a handful of these reconstructions exist. All of them vary slightly in function as the interpretations of the gears differ in each case.
Source: Wikipedia Commons

men decide to dive for sponges in these waters unknown to them. Maybe they will get lucky. Sponge divers can dive to an amazing depth of 40-50 meters (~150 feet), and Elias Stadiatis is one of them. He jumps off the boat into the warm Mediterranean waters. To his amazement, he spots what looks like an outline of a large shipwreck at a depth of about 45 meters. He also spots what is rather typical for Mediterranean shipwrecks and a dead giveaway that the shipwreck is old: Ancient Amphoras. A few meters further he spots something even more exciting: A pile of bronze and marble statues. He has seen ancient arti-

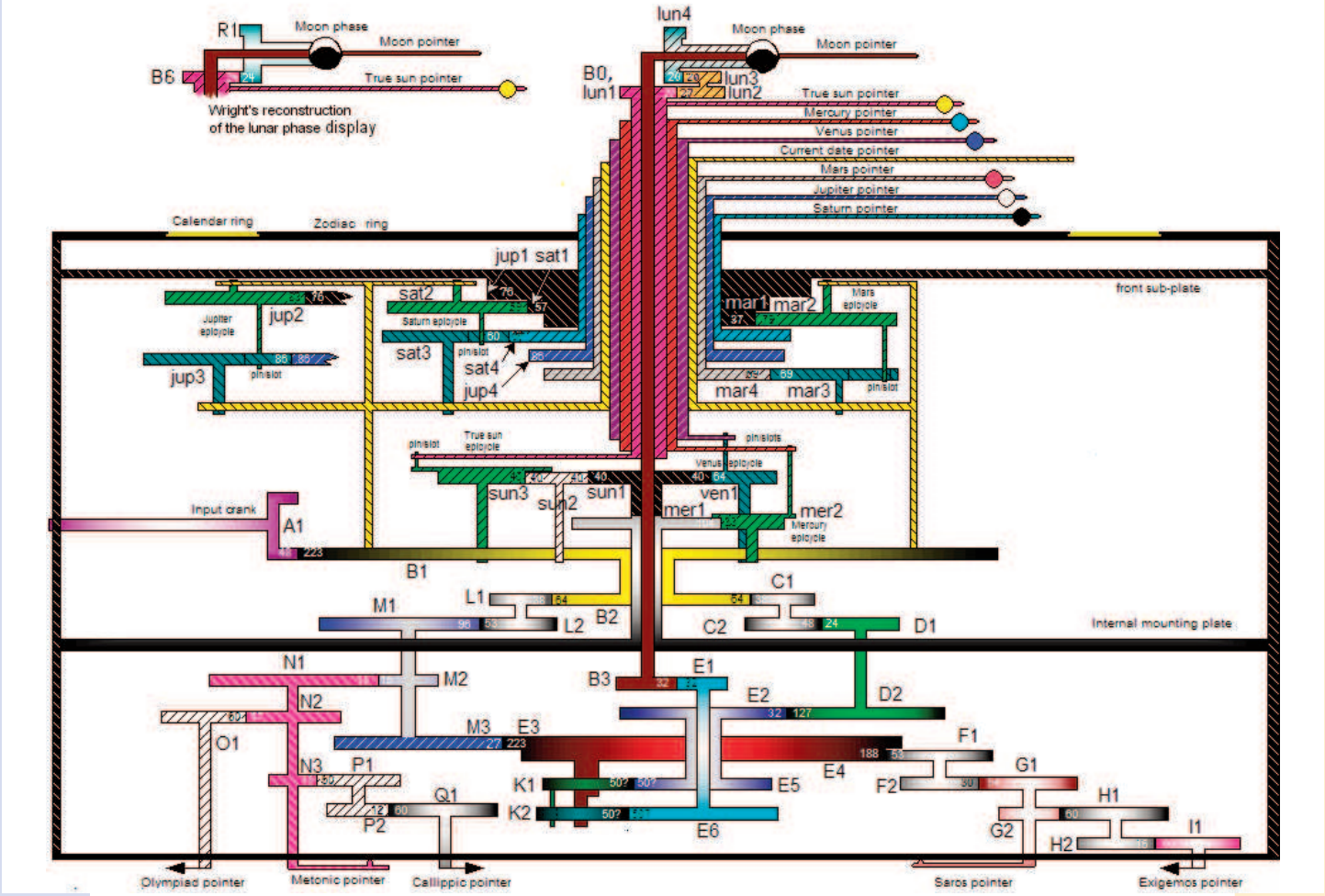
The Antikythera Mechanism: known gears and accuracy of computation

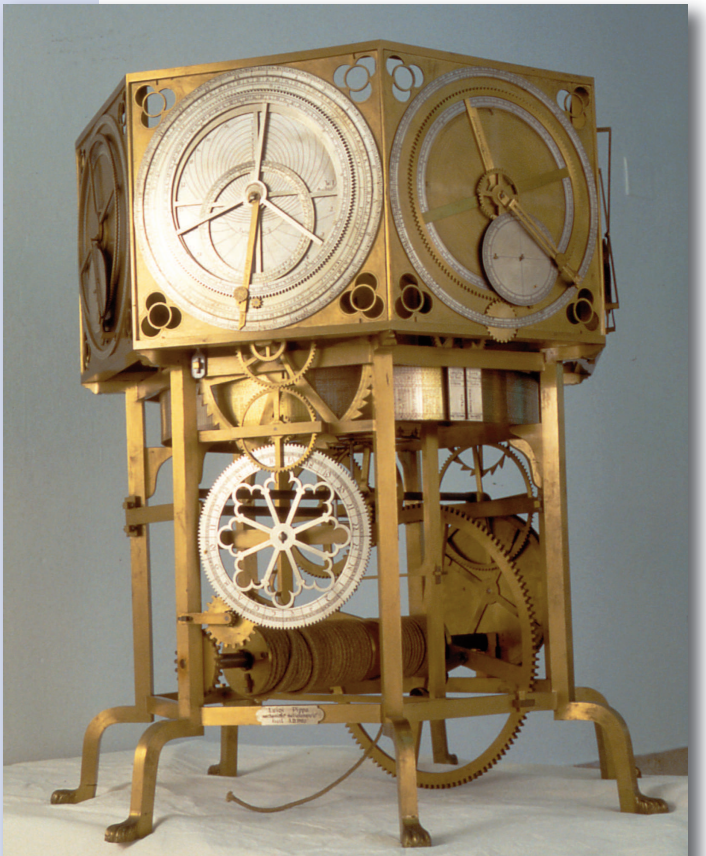
Gear name[table 1]	Function of the gear/pointer	Expected simulated interval of a full circular revolution	Mechanism Formula[table 2]	Computed interval	Gear direction[table 3]
x	Year gear	1 tropical year	1 (by definition)	1 year (presumed)	cw[table 4]
b	the moon's orbit	1 sidereal month (27.321661 days)	Time(b) = Time(x) * (c1 / b2) * (d1 / c2) * (e2 / d2) * (k1 / e5) * (e6 / k2) * (b3 / e1)	27.321 days[table 5]	cw
r	lunar phase display	1 synodic month (29.530589 days)	Time(r) = 1 / (1 / Time(b2 [mean sun] or sun3 [true sun])) - (1 / Time(b)))	29.530 days[table 5]	
n*	Metonic pointer	Metonic cycle () / 5 spirals around the dial = 1387.94 days	Time(n) = Time(x) * (l1 / b2) * (m1 /l2) * (n1 / m2)	1387.9 days	ccw[table 6]
o*	Olympiad pointer	4 years	Time(o) = Time(n) * (o1 / n2)	4.00 years	cw[table 6][table 7]
q*	Callippic pointer	27758.8 days	Time(q) = Time(n) * (p1 / n3) * (q1 /p2)	27758 days	ccw[table 6]
e*	lunar orbit precession	8.85 years	Time(e) = Time(x) * (l1 / b2) * (m1 / l2) * (e3 / m3)	8.8826 years	ccw[table 8]
g*	Saros cycle	Saros time / 4 turns = 1646.33 days	Time(g) = Time(e) * (f1 / e4) * (g1 / f2)	1646.3 days	ccw[table 6]
i*	Exeligmos pointer	19755.8 days	Time(i) = Time(g) * (h1 / g2) * (i1 / h2)	19756 days	ccw[table 6]
The following are proposed gearing from the 2012 Freeth and Jones reconstruction:					
sun3*	True sun pointer	1 mean year	Time(sun3) = Time(x) * (sun3 / sun1) * (sun2 / sun3)	1 mean year[table 5]	cw[table 9]
mer2*	Mercury pointer	115.88 days (synodic period)	Time(mer2) = Time(x) * (mer2 / mer1)	115.89 days[table 5]	cw[table 9]
ven2*	Venus pointer	583.93 days (synodic period)	Time(ven2) = Time(x) * (ven1 / sun1)	584.39 days[table 5]	cw[table 9]
mars4*	Mars pointer	779.96 days (synodic period)	Time(mars4) = Time(x) * (mars2 / mars1) * (mars4 / mars3)	779.84 days[table 5]	cw[table 9]
jup4*	Jupiter pointer	398.88 days (synodic period)	Time(jup4) = Time(x) * (jup2 / jup1) * (jup4 / jup3)	398.88 days[table 5]	cw[table 9]
sat4*	Saturn pointer	378.09 days (synodic period)	Time(sat4) = Time(x) * (sat2 / sat1) * (sat4 / sat3)	378.06 days[table 5]	cw[table 9]

Top: A table showing the functions of the known gears and their computational values.

Bottom: The schematic layout of the Antikythera Mechanism shows how incredibly complex it is.

Source: Wikipedia Commons





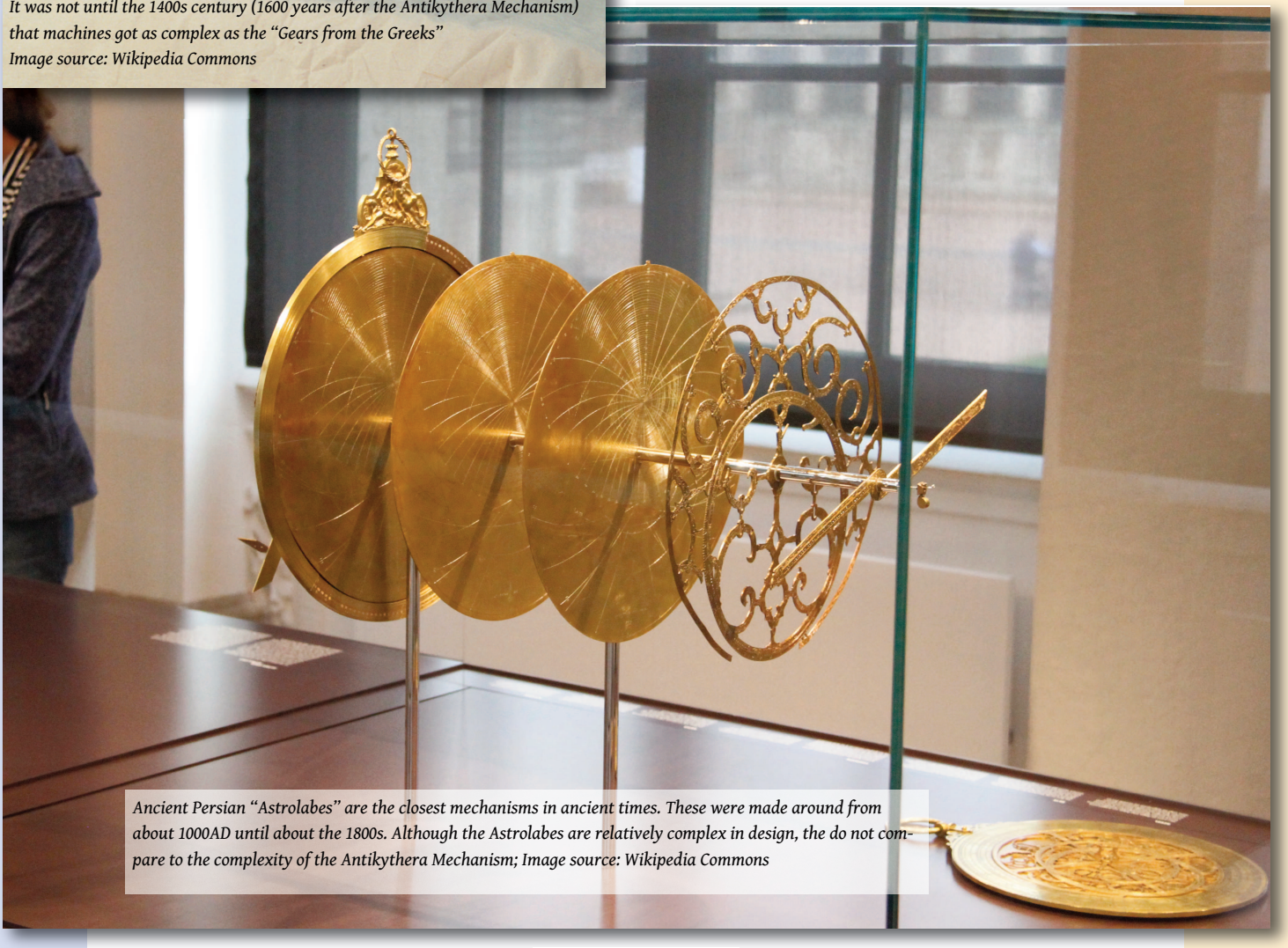
It was not until the 1400s century (1600 years after the Antikythera Mechanism) that machines got as complex as the "Gears from the Greeks" Image source: Wikipedia Commons

facts in the ocean before and immediately recognizes the badly overgrown remnants. He surfaces with a life-sized arm of a bronze statue and presents it to his colleagues. The crew marks the site of the shipwreck and sail home to their port. The honorable and courageous men report their find to the proper authorities, bringing the bronze arm of the statue with them for proof. The divers were ultimately rewarded for their find and their honesty with the sum of $5000, a very nice amount of money, especially for the time.

What followed were several recovery expeditions to the site, mounted by the Greek Archaeological Society and the Greek Archaeological Museum in Athens where most of the recovered finds are still housed today.

The shipwreck contained a wealth of different artifacts, ranging from pottery, amphoras, marble and bronze statues, sculptures and many others.

As archaeologists examine the artifacts in more detail after being brought back to the Greek capital of Athens, one strange "rock" captures the eyes of archaeologist Valerios Stais. He noticed a strange gear embedded into the rock. He is perplexed and compares its appearance to an astronomical clock. But his



Ancient Persian "Astrolabes" are the closest mechanisms in ancient times. These were made around from about 1000AD until about the 1800s. Although the Astrolabes are relatively complex in design, the do not compare to the complexity of the Antikythera Mechanism; Image source: Wikipedia Commons

Exploded view of an 1800 century astrolabe; Image source: Wikipedia Commons

colleagues at the time don't agree with him. For them, the gears are too complex to be from the time of the other finds of the shipwreck. They conclude that the rock with the gears must be from a much later time. The scholars mention the artifact in a few papers, but soon lose interest in the item, and it disappears in the vault of the National Museum of Athens for the next 50 years. [1]

In 1951, Yale University Professor and science historian, Derek de Solla Price, stumbles across notes mentioning the item and becomes interested. Over the next 20 years he studies the strange artifact and his research concludes in the amazing science publication with the long name "*Gears from the Greeks – The Antikythera Mechanism. A calendar Computer from ca. 80 B.C.*" [2]

Professor de Solla Price's work is a thorough investigation with -for the time- top of the line scientific methods. Along with Greek nuclear physicist, Charalampos Karakalos, he makes 82 images with an X-Ray and Gamma Ray imager and is able to study the artifact in detail without damaging it. The 82 x-ray images finally reveal the complexity of what is now called the Antikythera Mechanism. The Mechanism was found in one main lump, but was later divided into several fragments, and the close examination reveals fine and extremely complex gearing, Greek writing on many of the fragments, symbols, holes for levers and handles. The mechanism seemed to have originally been housed in a wooden box of some sort. Material analysis revealed that the gears were made from bronze. In his work,

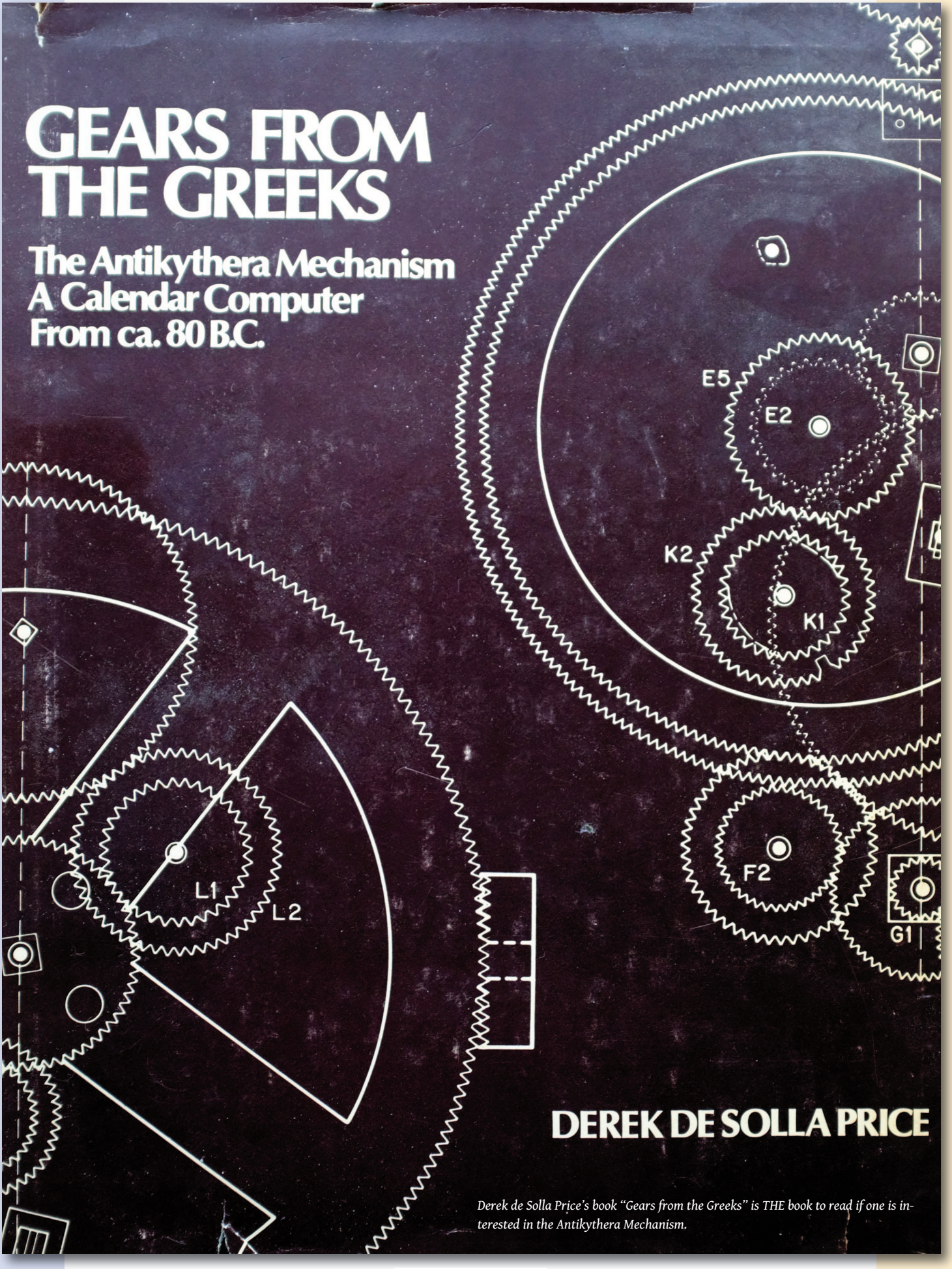
The original remnants of the Antikythera Mechanism in the National Museum in Athens, Greece. Source: Wikipedia.

Professor de Solla Price dates the mechanism back to at least 80 B.C.

The complexity of the device simply stuns the scientists. They count at least 30 different gears in various diameters and teeth sizes. In the book "Gears of the Greek..." they painstakingly reconstruct and re-calculate what the machine would have been used for in ancient times.

The complexity of the mechanism is without example in ancient times. Machines comparable to the device are not seen in history until the invention of astronomical clocks in the 1400s.

Professor de Solla Price's groundbreaking work on the Antikythera Mechanism in the 1970s doesn't stand alone, though. Several scientists and researchers have



Derek de Solla Price's book "Gears from the Greeks" is THE book to read if one is interested in the Antikythera Mechanism.

worked hard to decipher the functionality of the mechanism. Replicas have been built and modern, computer generated models have been created. As of today, the following capabilities of the device have been reconstructed:

The Sun gear *is operated from the hand-operated crank (connected to gear a1, driving the large four-spoked mean sun gear, b1) and in turn drives the rest of the gear sets. The sun gear is b1/b2 and b2 has 64 teeth. It directly drives the date/mean sun pointer (there may have been a second, "true sun" pointer that displayed the sun's elliptical anomaly; it is discussed below in the Freeth reconstruction). In this discussion, reference is to modeled rotational period of various pointers and indicators; they all assume the input rotation of the b1 gear of 360 degrees, corresponding with one tropical year, and are computed solely on the basis of the gear ratios of the gears named*

The Moon train *starts with gear b1 and proceeds through c1, c2, d1, d2, e2, e5, k1, k2, e6, e1, and b3 to the moon pointer on the front face. The gears k1 and k2 form an epicyclic gear system; they are an identical pair of gears that don't mesh, but rather, they operate face-to-face, with a short pin on k1 inserted into a slot in k2. The two gears have different centers of rotation, so the pin must move back and forth in the slot. That increases and decreases the radius at which k2 is driven, also necessarily varying its angular velocity (presuming the velocity of k1 is even) faster in some parts of the rotation than others. Over an entire revolution the average velocities are the same, but the fast-slow variation models the effects of the elliptical orbit of the moon, in consequence of Kepler's second and third laws. The modeled rotational period of the moon pointer (averaged over a year) is 27.321 days, compared to the modern length of a lunar sidereal month of 27.321661 days. As mentioned, the pin/slot driving of the k1/k2 gears varies the displacement over a year's time, and the mounting of those two gears on the e3 gear supplies a precessional advancement to the ellipticity modeling with a period of 8.8826 years, compared with the current value of precession period of the moon of 8.85 years.[*

The system also models the phases of the moon. The moon pointer holds a shaft along its length, on which is mounted a small gear named r, which meshes to the sun pointer at B0 (the connection between B0 and the rest of B is not visible in the original mechanism, so whether b0 is the current date/mean sun pointer or a hypothetical true sun pointer is not known). The gear rides around the dial with the moon, but is also geared to the sun — the effect is to perform a differential gear operation, so the gear turns at the synodic month period, measuring in effect, the angle of the difference between the sun and moon pointers. The gear drives a small ball that appears through an opening in the moon pointer's face, painted longitudinally half white and half black, displaying the phases pictorially. It turns with a modeled rotational period of 29.53 days; the modern value for the synodic month is 29.530589 days.

The Metonic train *is driven by the drive train b1, b2, l1, l2, m1, m2, and n1, which is connected to the pointer. The modeled rotational period of the pointer is the length of the 6939.5 days (over the whole five-rotation spiral), while the modern value for the Metonic cycle is 6939.69 days.*

The Olympiad train *is driven by b1, b2, l1, l2, m1, m2, n1, n2, and o1, which mounts the pointer. It has a computed modeled rotational period of exactly 4 years, as expected. Incidentally, it is the only pointer on the mechanism that rotates counter-clockwise; all of the others rotate clockwise.*

The Callippic train *is driven by b1, b2, l1, l2, m1, m2, n1, n3, p1, p2, and q1, which mounts the pointer. It has a computed modeled rotational period of 27758 days, while the modern value is 27758.8 days.*

The Saros train *is driven by b1, b2, l1, l2, m1, m3, e3, e4, f1, f2, and g1, which mounts the pointer. The modeled rotational period of the Saros pointer is 1646.3 days (in four rotations along the spiral pointer track); the modern value is 1636.33 days.*

The Exeligmos train *is driven by b1, b2, l1, l2, m1, m3, e3, e4, f1, f2, g1, g2, h1, h2, and i1, which mounts the pointer. The modeled rotational period of the Exeligmos pointer is 19,756 days; the modern value is 19755.96 days.*

Apparently, gears m3, n1-3, p1-2, and q1 did not survive in the wreckage. The functions of the pointers were deduced from the remains of the dials on the back face, and reasonable, appropriate gearage to fulfill the functions was proposed, and is generally accepted [1]

After Derek de Solla Price, several other papers have been published on the Antikythera mechanism, most notably Tony Freeth and Alexander in their book "The Cosmos in the Antikythera Mechanism". [3]

They painstakingly reconstructed the mechanism's capability to calculate planetary movements, the sun and moon, lunar anomalies like eclipses and other calendar and astronomical functions.

The Antikythera mechanism did all of that in 80 B.C.! The latest estimates date the device even further back, some scholars say as far as ~200 B.C.

So what makes the Antikythera mechanism so unusual?

Just to make one thing clear from the start because I'm sure somebody will say that this Eisengruber guy said the Antikythera mechanism is extraterrestrial in origin. So here it is: I am NOT saying the Antikythera mechanism is an extraterrestrial artifact. It is the work by very smart ancient Greek people. Because – and that might come as a surprise to some – the ancient people all over the world were just as smart as we are today. Physics, Chemistry and Mathematics worked the same thousands of years ago as it works today.

In fact, many of today's scientific principles and mathematic rules were discovered and formulated in ancient Greece by VERY smart people. When I was a teenager, our tongue-in-cheek slogan was "Pythagoras – torturing teenagers with triangles since 560 B.C.". Archimedes, Aristarchos of Samos, Plato, Euclid and many more are other names very well known to any high school students today.

The Greek and the Roman world was incredibly sophisticated. Buildings, architecture and instrumentation (e.g. medical instruments) didn't lack comfort, some houses even had in-floor heating and running water.

One of the most ingenious mathematicians and engineers of the Greek world was Heron of Alexandria (some sources refer to him as Hero of Alexandria) who lived from ca. 10 A.D. to 70 A.D.

Heron of Alexandria wrote a number of books, some of which were lost until they were re-discovered in 1896.

The Encyclopedia Britannica tells us:

Heron's most important geometric work, Metrica, was lost until 1896. It is a compendium, in three books, of geometric rules and formulas that Heron gathered from a variety of sources, some of them going back to ancient Babylon, on areas and volumes of plane and solid figures. Book I enumerates means of finding the area of various plane figures and the surface areas of common solids. Included is a derivation of Heron's formula (actually, Archimedes' formula) for the area A of a triangle,$A = \sqrt{(s(s-a)(s-b)(s-c))}$in which a, b, and c are the lengths of the sides of the triangle, and s is one-half the triangle's perimeter. Book I also contains an iterative method known by the Babylonians (c. 2000 BC) for approximating the square root of a number to arbitrary accuracy. (A variation on such an iterative method is frequently employed by computers today.) Book II gives methods for computing volumes of various solids, including the five regular Platonic solids. Book III treats the division of various plane and solid figures into parts according to some given ratio.

Other works on geometry ascribed to Heron are Geometrica, Stereometrica, Mensurae, Geodaesia, Definitiones, and Liber Geëponicus, which contain problems similar to those in the Metrica. However, the first three are certainly not by Heron in their present form, and the sixth consists largely of extracts from the first. Akin to these works is the Dioptra, a book on land surveying; it contains a description of the diopter, a surveying instrument used for the same purposes as the modern theodolite. The treatise also contains applications of the diopter to measuring celestial distances and describes a method for finding the distance between Alexandria and Rome from the difference between local times at which a lunar eclipse would be observed at the two cities. It ends with the description of an odometer for measuring the distance a wagon or cart travels. Catoptrica ("Reflection") exists only as a Latin translation of a work formerly thought to be a fragment of Ptolemy's Optica. In Catoptrica Heron explains the rectilinear propagation of light and the law of reflection.

Of Heron's writings on mechanics, all that remain in Greek are Pneumatica, Automatopoietica, Belopoeica, and Cheirobalistra. The Pneumatica, in two books, describes a menagerie of mechanical devices, or "toys": singing birds, puppets, coin-operated machines, a fire engine, a water organ, and his most famous invention, the aeolipile, the first steam-powered engine. This last device consists of a sphere mounted on a boiler by an axial shaft with two canted nozzles that produce a rotary motion as steam escapes. (See the animation.) The Belopoeica ("Engines of War") purports to be based on a work by Ctesibius of Alexandria (fl. c. 270 BC). Heron's Mechanica, in three books, survives only in an Arabic translation, somewhat altered. This work is cited by Pappus of Alexandria (fl. AD 300), as is also the Baroulcus ("Methods of Lifting Heavy Weights"). Mechanica, which is closely based on the work of Archimedes, presents a wide range of engineering principles, including a theory of motion, a theory of the balance, methods of lifting and transporting heavy objects with mechanical devices, and how to calculate the centre of gravity for various simple shapes. Both Belopoeica and Mechanica contain Heron's solution of the problem of two mean proportionals—two quantities, x and y, that satisfy the ratios a:x = x:y = y:b, in which a and b are known—which can be used to solve the problem of constructing a cube with double the volume of a given cube. (For the discovery of the mean proportional relationship see Hippocrates of Chios.)

Only fragments of other treatises by Heron remain. One on water clocks is referred to by Pappus and the philosopher Proclus (AD 410–485). Another, a commentary on Euclid's Elements, is often quoted in a surviving Arabic work by Abu'l-'Abbās al-Faḍl ibn Ḥātim al-Nayrīzī (c. 865–922). [4]

But the Antikythera mechanism is different and here is why: Every modern invention we know of has a history. An evolution. Computers, cell phones and tablets had their "granddaddies". Remember the Commodore 64?

Or the Atari computers? Maybe you remember the first handheld phones that were bigger and heavier than a laptop today.
The first cars were nothing more than a horse carriage without the horse. Today, cars can pretty much drive by themselves in all kinds of different conditions, are air conditioned and are available in all forms, shapes and sizes.
What is considered to be the first car with an internal combustion engine was built in 1885 by German inventor Carl Benz. But even that had somewhat of a predecessor. As early as in the mid-1700s inventors tried to build wagons that were non-animal powered and succeeded in a few – rather primitive - steam and electric powered vehicles. So in a time-frame of roughly 250 years, we can see a steady progression of car development.
It is the same with pretty much any other technical invention. Trains, planes, coffee machines, buildings, pottery, even food, everything seems to have a "natural" development, a time line which is more or less well documented.
Not so with the Antikythera mechanism. It does not have a predecessor. Not even close. Nothing like it is mentioned in any ancient text, myth or otherwise. The device MUST have stood out in its day, I have no doubt about it. Yet, not a word has been mentioned anywhere. Sure, records have been lost over time and theoretically the knowledge about anything can be lost forever in a fire like the one which destroyed the library of Alexandria around 50 B.C.
In addition to having no predecessor, nothing remotely similar to the Antikythera mechanism has been found for at least another 1000 (!) years. But wait, one might say, what about the Inventions of Heron of Alexandria which I mentioned earlier?
Indeed, in many discussions about the Antikythera mechanism, the Inventions of Heron of Alexandria are often used put the mechanism in a specific "context" which reads, "If Heron of Alexandria was able to do this, the Antikythera Mechanism is not that "sensational" at all and "the ancients were smarter then we think" and that's all there is to it."
It has also been speculated that the Antikythera mechanism was the work of a single genius. Some kind of "Leonardo da Vinci of Greece", an individual way ahead of his time.
So let's look at this logically: We have a mechanism which is undocumented in the ancient world. Not a word has been mentioned in the antique literature anywhere. We DO have the accounts of Heron's inventions though. Wouldn't it be logical that the Antikythera mechanism would be mentioned in some ancient sources as well? Of course it's possible that this material was lost over time, no question about it.

In order to create the Antikythera mechanism, the following conditions have to be met:

1. The scientific knowledge of the planetary motions, a heliocentric solar system and basic gravitational laws have to be known to the maker(s) of the device.
2. The maker(s) also had to know the mathematics behind the gearings and ratios.
3. The device has to be built to extremely exact specifications otherwise it wouldn't work.
4. It is impossible that a device of this complexity is unique. It has to have at least predecessors.

to 1: Today we know that the ancient Greeks had a very advanced scientific knowledge. They were able to calculate the circumference of the Earth. They knew the planets and in the 3rd Century B.C., Aristarchos of Samos proposed a heliocentric solar system. So this is in line with the knowledge to build the Antikythera mechanism.

to 2: The Greeks had excellent mathematicians. As I said earlier, many of today's basic mathematical principles are based on Greek mathematicians and philosophers. The knowledge contained in the Antikythera mechanism was certainly "top of the line" in its time.

to 3: Here is where it gets trickier. The Greeks had incredible artists, artisans and metal workers. If you go to any museum displaying Greek art and jewelry of the time, you can see the sophistication in those pieces. But it is a different story to manufacture pre-calculated gearing of this complexity. One has to imagine that all the gears have to be cut out of bronze by hand. The skill to do this is incredible. But yes, it is doable. Even today, to build replicas of the mechanism is not an easy task. Worldwide there are only a handful of them around. And those have been built with modern tools and the knowledge on how the machine worked and looked.

In my opinion, the gearing had to have been made by one of the best metal workers of the day. The Antikythera mechanism had to be a collaboration of at least a mathematician and metalworker – both the best of their time. Some scholars suggest that the mechanism was the work of a single individual. I don't think so. On the contrary, I even think that the Antikythera mechanism was a collaborated project from many individuals who wanted to build some kind of "supercomputer".

to 4: The fact that no mention about the Antikythera mechanism in ancient texts has ever been found is puzzling. That nothing even remotely similar has ever been found is downright mind blowing. Think about it. Machines like these must have been incredibly expensive. Nobody would have

just disposed of them. They must have been a treasured item over many generations. To not find ANY trace ANYWHERE in the thousands of archaeological digs all aver the Mediterranean along with no mention of them anywhere in literature/scriptures is quite a feat. To put it in perspective, one of the rarest glass types found from the antiquities is called "Diatret" or "cage cup" glass. The glass was only made for royalty and extremely wealthy individuals. It is believed that the glass was only made by two or three manufacturers in the ancient world and was rare even when it was new in antiquity. Today, only a handful of examples are known. But nevertheless even this rarest of finds is preserved in SEVERAL examples. Shouldn't it be the same with machines like the Antikythera mechanism? Of course, absence of proof does not mean proof of absence. Maybe similar mechanisms have just not been found yet. Or could it be that the Antikythera mechanism is truly unique? Is it really the work of a single mind, a pure result of an ancient genius?

All of this does not sit right with me. I would like to offer another hypothesis that might steer the research into the mechanism in a different direction.

In their work, Freeth and Jones [3] note the following, summarized by Wikipedia [1]:

"Investigations by Freeth and Jones reveal that their simulated mechanism is not particularly accurate, the Mars pointer being up to 38° off at times. This is not due to inaccuracies in gearing ratios in the mechanism, but rather to inadequacies in the Greek theory. The accuracy could not have been improved until first Ptolemy put forth his Planetary Hypotheses in the second half of the second century AD and then the introduction of Kepler's Second Law.

In short, the Antikythera Mechanism was a machine designed to predict celestial phenomena according to the sophisticated astronomical theories current in its day, the sole witness to a lost history of brilliant engineering, a conception of pure genius, one of the great wonders of the ancient world—but it didn't really work very well!

In addition to theoretical accuracy, there is the matter of mechanical accuracy. Freeth and Jones note that the inevitable "looseness" in the mechanism due to the hand-built gears, with their triangular teeth and the frictions between gears, and in bearing surfaces, probably would have swamped the finer solar and lunar correction mechanisms built into it:

Though the engineering was remarkable for its era, recent research indicates that its design conception exceeded the engineering precision of its manufacture by a wide margin—with considerable accumulative inaccuracies in the gear trains, which would have canceled out many of the subtle anomalies built into its design."

I find this highly intriguing. The mysterious Greek inventor(s) painstakingly designed and built a machine which wasn't even very accurate. What good is a machine that aims to predict e.g. a lunar or solar eclipse, but misses by a few days? I could imagine the kings, this machine is most likely for, would not be very impressed. All of this work (most likely expensive, as all the gears are handmade by an expert), and the results are not very accurate? What's going on? Would you use a calculator that is only approximately right? 10+11~23.5?

The solution: Whoever built the mechanism didn't really fully understand it themselves! Whoever built it, built a replica from much older sources and plans! These sources were kept in the famous library of Alexandria which contained knowledge from an ancient time much further back as today's history books suggest. This was the time of the "gods", the mysterious lost civilization which left many traces all over the planet. This culture or civilization which was directly influenced by the "gods" was somehow destroyed by a catastrophe. Much later, the (for us) ancient Greek scientists finally reached a level of sophistication to understand some of the ancient text contained in the library of Alexandria and other select places which were specifically built to house the remnants of this ancient culture. That's why it is no coincidence that Heron and his "colleagues" gathered around Alexandria and the Antikythera mechanism was found on a shipwreck en route from Greece to North Africa. I think that the brightest minds in the ancient world tried to make sense of the "treasures" of knowledge they found in much older sources. And that's why the Antikythera mechanism is such an "outlier". I think that we will not find a second mechanism like it because it was built after an ancient plan. It didn't need predecessors because the "blueprints" were already complete. In a way, it is ironic that today's restorers and replica builders of the Antikythera mechanism are doing exactly the same thing as the ancients did. History repeats itself.

This article will be continued in a later issue of PaleoSeti Magazine.

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[1] https://en.wikipedia.org/wiki/Antikythera_mechanism

[2] de Solla Price, Derek "Gears from the Greeks – The Antikythera Mechanism. A calendar Computer from ca. 80B.C."

[3] Freeth, Tony; Jones, Alexander (2012). "The Cosmos in the Antikythera Mechanism". Institute for the Study of the Ancient World

[4] https://www.britannica.com/biography/Heron-of-Alexandria

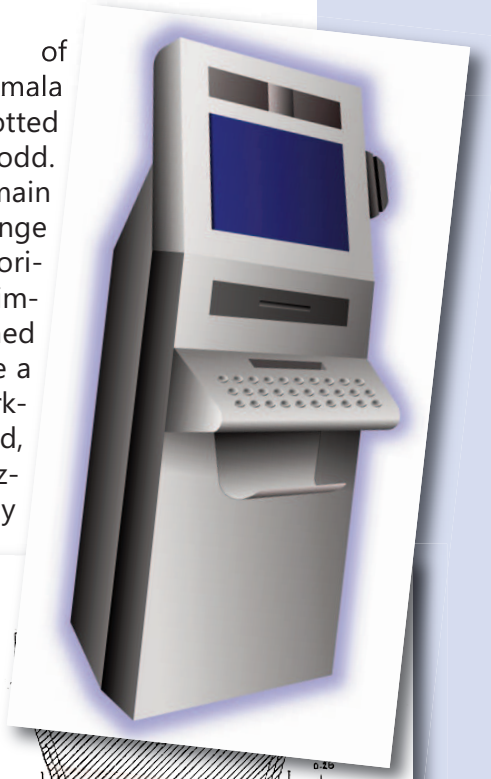
Missunderstood technology
Representations of ancient
High Technology?

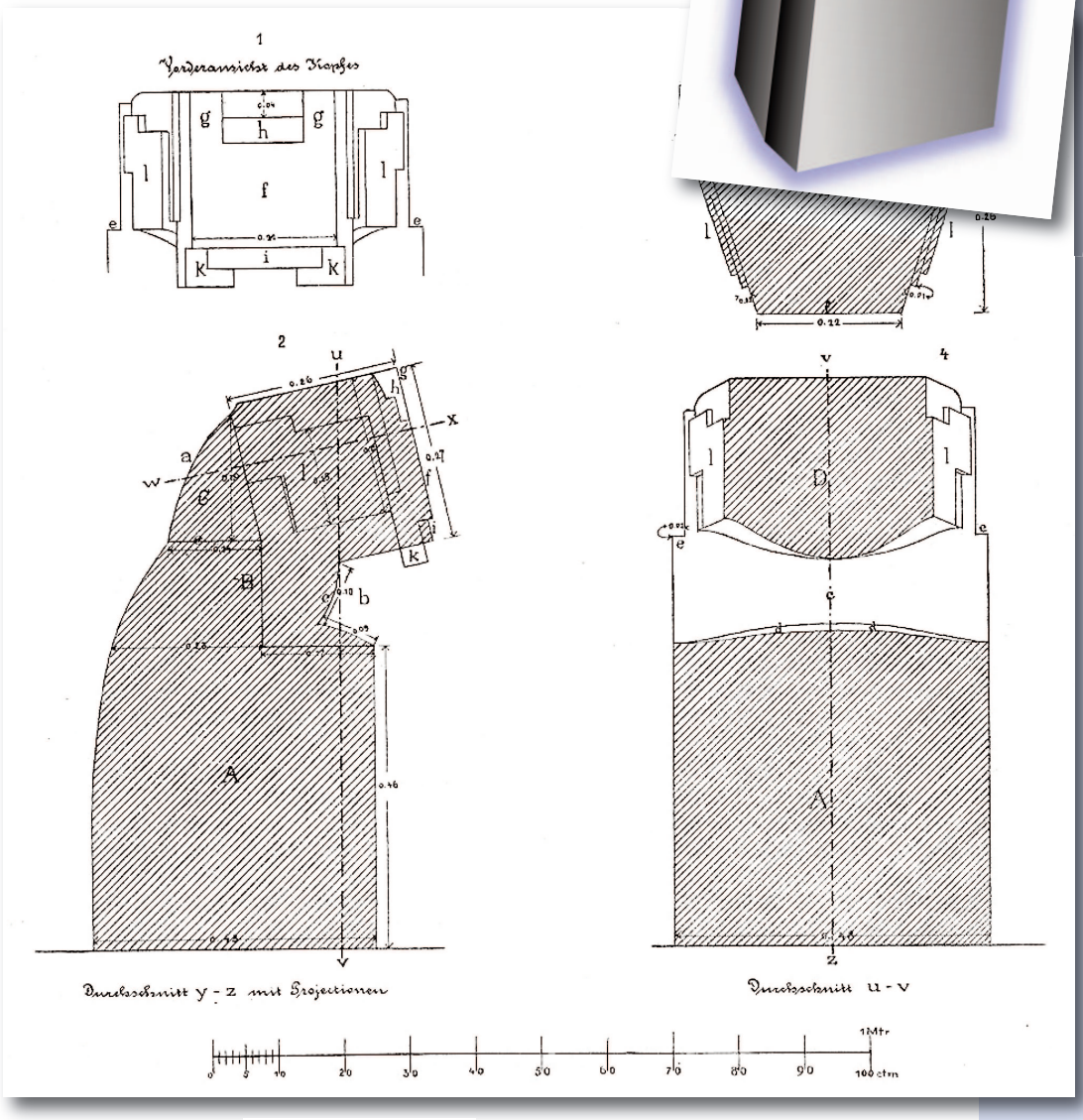
Article by Herbert Eisengruber

During my study of the enigmatic site of Puma Punku near Tiwanaku in Bolivia (see my article in Issue 2 of PaleoSeti Magazine [1]), I came across a very unusual drawing in one of the most important books about the site from 1892 by M. Uhle and A. Stuebel [2]. There, on page 145, is a drawing that the two German archaeologists drew. They write: "This mysterious sculpture is located at the main plaza of Tiwanaku on the western side, right across from the church. The sculpture is puzzling as it shows common signs of a statue, without really being one [...]". The drawing can be seen in [photo 1]. When I first looked at the image, I was perplexed. The drawing immediately reminded me of a stand-alone computer terminal, sometimes also called a "computer kiosk". Of course, the two German Archaeologists from 1892 wouldn't have had a comparison like this. At closer inspection the drawing looks remarkable. Even the "sculpture's" height of approximately 1m 20cm would be consistent with such a computer terminal. When I first saw the image, I also thought about misunderstood technology. Many other carvings and drawings in Puma Punku and Tiwanaku suggest a highly technical origin. Only as our own technology advances, we might be able to recognize the ancients' attempts to capture what they have seen.

I wrote about what I think are depictions of possible virtual reality devices in Issue 3 of PaleoSeti Magazine [3].

During a visit in the anthropological museum of Guatemala in Guatemala City, my wife spotted something quite odd. Here in one of the main exhibit halls is a strange carving on an odd horizontal stele. My wife immediately mentioned "this almost looks like a stylized computer workstation". And indeed, the similarity is amazing. One can clearly





make out what could be looked at as a keyboard of some sort and on top, a computer screen. Surrounding the "screen" is a somewhat wavy carving. In modern drawings these wavy "rays" around items always are used to indicate something glowing. It's a universal method to show something is lit up. But this stele is Mayan and over 1500 years old. Did the ancient artists use the same technique to show us some sort of lit up computer screen? Is this stele also a depiction of misunderstood technology?

Why would an advanced society use technology that looks like ours, critics may ask. Simple: Because some technologies are basic and don't become obsolete easily. Screens of some sort are an excellent way to display data. Now and in the future. We have now over 40 years of rapid development in the computer industry, but screens are always the method of choice to display data. And this will stay that way. The same with keyboards. Nothing is more effective for data input.

I don't know about you, but every time such pieces of misunderstood technology are found in museums are discovered, I get really excited. What else do the museums of the world have in their vaults waiting to be discovered?

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Book & Film Recommendations

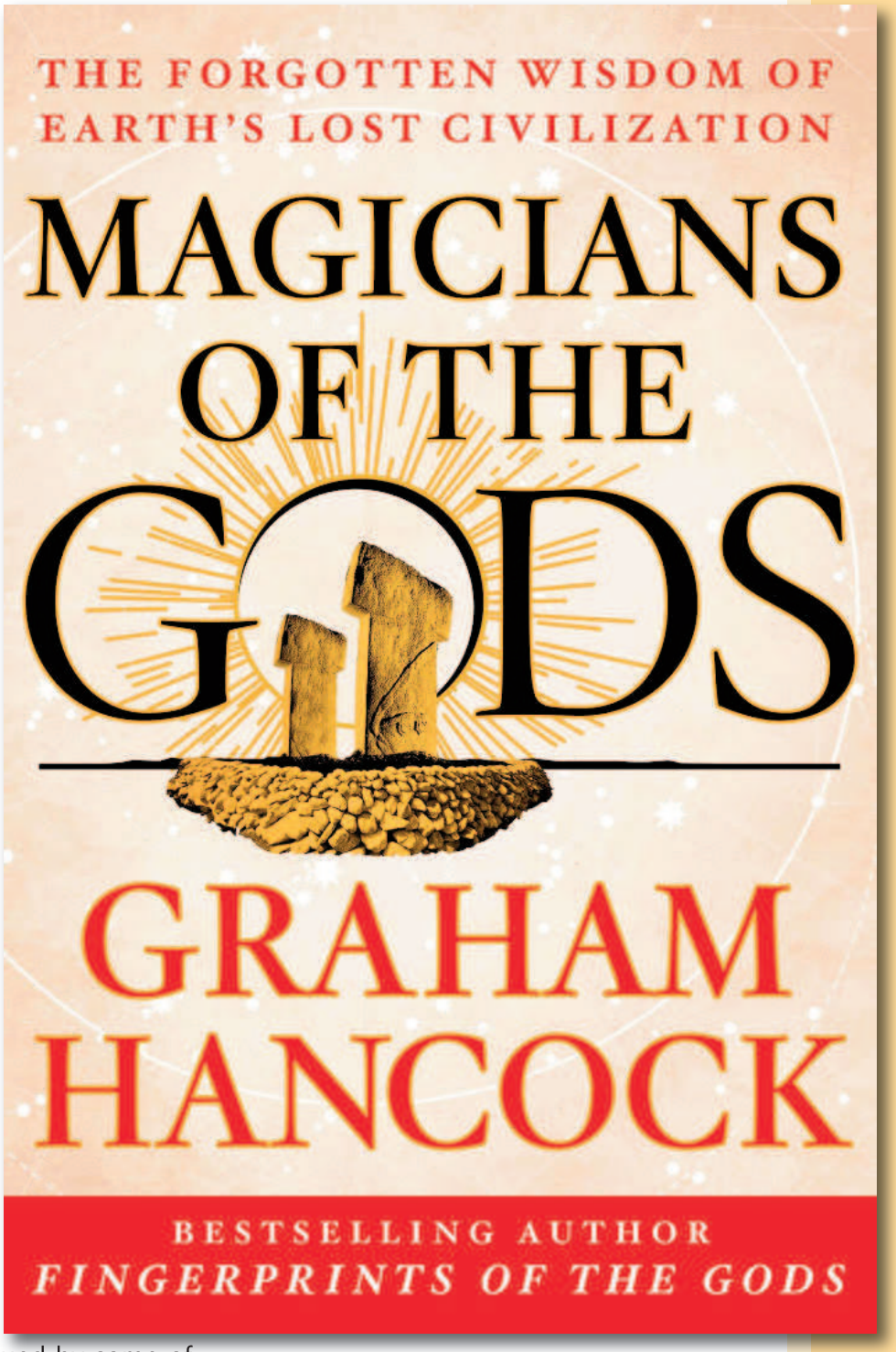
In every issue, we are going to suggest book and/or film titles that are of interest to the PaleoSeti or Lost Civilization Theories.

Review by Herbert Eisengruber

Graham Hancock

Magicians of the Gods

The forgotten wisdom of Earth's Lost Civilization



I'm always excited when a new book from Graham Hancock comes on the market. Although I differ with some of the conclusions of his theories at times, I appreciate his clear and concise writing style and stringent arguments.

Twenty years after his bestseller "Fingerprints of the Gods", "Magicians of the Gods" reflects an equal amount of research in Hancock's Lost Civilization Theory. What I admire the most is his ability to admit when he is just speculating, hypothesizing or just plain guessing. He is also an author who is not afraid to be wrong. But back to "Magicians of the Gods". It starts right were "Fingerprint of the Gods" left off. Especially the section about the ancient site Gobekli Tepe in Turkey is worth the purchase of the book alone.

Hancock's "Magicians" those survivors of the Lost Civilization who tried to rebuild a new civilization after an enormous cataclysm left traces all over world.

"Magicians of the Gods" will stir your curiosity, no matter what "direction" you are coming from. Even "orthodox" archaeologists should be intrigued by some of the facts Graham Hancock presents.

"Magicians of the Gods" is available from all major book retailers, online or mortar-and-brick. Get it, it is a good read for anyone interested in archaeology and history.

Research at the Sundial Medicine Wheel in Alberta, Canada. Infrared image.

Be a part of the mysteries!

PaleoSeti Magazine wants your feedback. Tell us what you liked and what you didn't like about this issue. We are open to constructive critizism.

Contribute

Would you like to contribute to PaleoSeti Magazine? No problem. Get in touch with us with the email provided in the Masthead on page 2, and tell us a short overview of what your contribution or article will be about. Currently we can't pay any fees for submitted articles that are published in PaleoSeti Magazine, but that might change in the future. Your article should have a clear connection to archaeology, the Ancient Astronaut or Lost Civilization Theories.

Webpage

Please check out our website at www.paleoseti.com for more background information and much more PaleoSeti research. www.paleoseti.com is in its 18th online year and one of the longest running websites dealing with the Ancient Astronaut Theory.

Next Issue 12

The Silent Stones of Europe

News from Nazca - Starmap of the Ancients?

The Case for Ancient Astronauts - Part 7

... and more!

... Available end of June 2017